

CLAIMS

1 1. A nutritional supplement comprising at least two components
2 administered in effective daily dosages selected from the group consisting of:
3 25-2500 mg +/- alpha-lipoic acid,
4 50-7500 mg acetyl-L-carnitine,
5 25-2500 mg resveratrol;
6 100-5000 mg lecithin; and
7 30-6000 mg N-acetyl cysteine with the proviso that the composition
8 lipoic acid and the acetyl-L-carnitine are not administered together.

1 2. The composition of claim 1 and further comprising a carrier for
2 said components.

1 3. The composition of claim 1 wherein said lipoic acid comprises
2 alpha-lipoic acid.

1 4. The composition of claim 2 wherein said carrier comprises a
2 liquid.

1 5. The composition of claim 2 wherein said carrier is selected from
2 the group consisting of: a capsule, a transdermal patch, an injectable solution,
3 an intranasal aerosol and a suppository.

1 6. The composition of claim 2 wherein said carrier comprises a
2 tablet.

1 7. The composition of claim 1 wherein said composition comprises
2 at least one mitochondrial metabolite or promoter thereof selected from the
3 group consisting of 25-2500 mg of lipoic acid, 50-7000 mg acetyl-L-carnitine,
4 30-6000 mg N-acetyl cysteine, and 40-1000 mg resveratrol.

1 8. The composition of claim 1 wherein said composition comprises
2 at least one mitochondrial metabolite or promoter thereof selected from the
3 group consisting of 25-2500 mg of lipoic acid, 50-7000 mg acetyl-L-carnitine,
4 30-6000 mg N-acetyl cysteine, and 150-3000 mg lecithin.

1 9. The composition of claim 6 wherein said lecithin is present from
2 100-5000 mg.

1 10. The composition of claim 7 wherein said resveratrol is present
2 from 45-1000 mg.

1 11. A nutritional supplement comprising at least two components
2 administered in effective daily dosages selected from the group consisting of:
3 600-3000 mg +/- alpha-lipoic acid,
4 250-2000 mg acetyl-L-carnitine,

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5 45-1000 mg resveratrol;
6 200-2000 mg lecithin; and
7 100-750 mg N-acetyl cysteine with the proviso that the composition
8 lipoic acid and the acetyl-L-carnitine are not administered together.

1 12. The composition of claim 10 and further comprising a carrier
2 for said components.

1 13. The composition of claim 10 wherein said lipoic acid comprises
2 alpha-lipoic acid.

1 14. The composition of claim 11 wherein said carrier comprises a
2 liquid.

1 15. The composition of claim 11 wherein said carrier comprises a
2 tablet.

1 16. The composition of claim 10 wherein said composition
2 comprises at least one mitochondrial metabolite or promoter thereof selected
3 from the group consisting of 600-3000 mg of lipoic acid, 250-2000 mg acetyl-
4 L-carnitine, 100-750 mg N-acetyl cysteine, and 40-1000 mg resveratrol.

1 17. The composition of claim 10 wherein said composition
2 comprises at least one mitochondrial metabolite or promoter thereof selected
3 from the group consisting of 600-3000 mg of lipoic acid, 250-2000 mg acetyl-
4 L-carnitine, 100-7500 mg N-acetyl cysteine, and 150-3000 mg lecithin.

1 18. The composition of claim 15 wherein said lecithin is present
2 from 200-2000 mg.

1 19. The composition of claim 16 wherein said resveratrol is present
2 from 45-1000 mg.

1 20. The method of promoting cognitive or auditory function, said
2 method comprising the step of:
3 administering to said cells a composition comprising at least two
4 components in synergistic effective amounts at least two components selected
5 from the group consisting of:
6 25-2500 mg +/- alpha-lipoic acid,
7 50-7500 mg acetyl-L-carnitine,
8 25-2500 mg resveratrol;
9 100-5000 mg lecithin; and
10 30-6000 mg N-acetyl cysteine with the proviso that the composition
11 lipoic acid and the acetyl-L-carnitine are not administered together.

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- 1 21. The method of claim 19 wherein said step of administering
- 2 occurs daily.